

AP students in psychology should be able to do the following:

History and Approaches

- Recognize how philosophical perspectives shaped the development of psychological thought.
- Describe and compare different theoretical approaches in explaining behavior:
 - structuralism, functionalism, and behaviorism in the early years;
 - Gestalt, psychoanalytic/psychodynamic, and humanism emerging later;
 - evolutionary, biological, and cognitive as more contemporary approaches.
- Recognize the strengths and limitations of applying theories to explain behavior.
- Distinguish the different domains of psychology:
 - biological, clinical, cognitive, counseling, developmental, educational, experimental, human factors, industrial–organizational, personality, psychometric, and social.
- Identify the major historical figures in psychology (e.g., Mary Whiton Calkins, Charles Darwin, Dorothea Dix, Sigmund Freud, G. Stanley Hall, William James, Ivan Pavlov, Jean Piaget, Carl Rogers, B. F. Skinner, Margaret Floy Washburn, John B. Watson, Wilhelm Wundt).

Research Methods

- Differentiate types of research (e.g., experiments, correlational studies, survey research, naturalistic observations, and case studies) with regard to purpose, strengths, and weaknesses.
- Describe how research design drives the reasonable conclusions that can be drawn (e.g., experiments are useful for determining cause and effect; the use of experimental controls reduces alternative explanations).
- Identify independent, dependent, confounding, and control variables in experimental designs.
- Distinguish between random assignment of participants to conditions in experiments and random selection of participants, primarily in correlational studies and surveys.
- Predict the validity of behavioral explanations based on the quality of research design (e.g., confounding variables limit confidence in research conclusions).
- Distinguish the purposes of descriptive statistics and inferential statistics.
- Apply basic descriptive statistical concepts, including interpreting and constructing graphs and calculating simple descriptive statistics (e.g., measures of central tendency, standard deviation).
- Discuss the value of reliance on operational definitions and measurement in behavioral research.
- Identify how ethical issues inform and constrain research practices.
- Describe how ethical and legal guidelines (e.g., those provided by the American Psychological Association, federal regulations, local institutional review boards) protect research participants and promote sound ethical practice.

Biology and Behavior

- Identify basic processes and systems in the biological bases of behavior, including parts of the neuron and the process of transmission of a signal between neurons.
- Discuss the influence of drugs on neurotransmitters (e.g., reuptake mechanisms).
- Discuss the effect of the endocrine system on behavior.
- Describe the nervous system and its subdivisions and functions:
 - central and peripheral nervous systems;
 - major brain regions, lobes, and cortical areas;
 - brain lateralization and hemispheric specialization.
- Recount historic and contemporary research strategies and technologies that support research (e.g., case studies, split-brain research, imaging techniques).
- Discuss psychology's abiding interest in how heredity, environment, and evolution work together to shape behavior.
- Predict how traits and behavior can be selected for their adaptive value.
- Identify key contributors (e.g., Paul Broca, Charles Darwin, Michael Gazzaniga, Roger Sperry, Carl Wernicke).

Sensation and Perception

- Discuss basic principles of sensory transduction, including absolute threshold, difference threshold, signal detection, and sensory adaptation.
- Describe sensory processes (e.g., hearing, vision, touch, taste, smell, vestibular, kinesthesia, pain), including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.
- Explain common sensory disorders (e.g., visual and hearing impairments).
- Describe general principles of organizing and integrating sensation to promote stable awareness of the external world (e.g., Gestalt principles, depth perception).
- Discuss how experience and culture can influence perceptual processes (e.g., perceptual set, context effects).
- Explain the role of top-down processing in producing vulnerability to illusion.
- Discuss the role of attention in behavior.
- Challenge common beliefs in parapsychological phenomena.

- Identify the major historical figures in sensation and perception (e.g., Gustav Fechner, David Hubel, Ernst Weber, Torsten Wiesel).

States of Consciousness

- Describe various states of consciousness and their impact on behavior.
- Discuss aspects of sleep and dreaming:
 - stages and characteristics of the sleep cycle;
 - theories of sleep and dreaming;
 - symptoms and treatments of sleep disorders.
- Describe historic and contemporary uses of hypnosis (e.g., pain control, psychotherapy).
- Explain hypnotic phenomena (e.g., suggestibility, dissociation).
- Identify the major psychoactive drug categories (e.g., depressants, stimulants) and classify specific drugs, including their psychological and physiological effects.
- Discuss drug dependence, addiction, tolerance, and withdrawal.
- Identify the major figures in consciousness research (e.g., William James, Sigmund Freud, Ernest Hilgard).

Learning

- Distinguish general differences between principles of classical conditioning, operant conditioning, and observational learning (e.g., contingencies).
- Describe basic classical conditioning phenomena, such as acquisition, extinction, spontaneous recovery, generalization, discrimination, and higher-order learning.
- Predict the effects of operant conditioning (e.g., positive reinforcement, negative reinforcement, punishment, schedules of reinforcement).
- Predict how practice, schedules of reinforcement, and motivation will influence quality of learning.
- Interpret graphs that exhibit the results of learning experiments.
- Provide examples of how biological constraints create learning predispositions.
- Describe the essential characteristics of insight learning, latent learning, and social learning.
- Apply learning principles to explain emotional learning, taste aversion, superstitious behavior, and learned helplessness.
- Suggest how behavior modification, biofeedback, coping strategies, and self-control can be used to address behavioral problems.
- Identify key contributors in the psychology of learning (e.g., Albert Bandura, John Garcia, Ivan Pavlov, Robert Rescorla, B. F. Skinner, Edward Thorndike, Edward Tolman, John B. Watson).

Cognition

- Compare and contrast various cognitive processes:
 - effortful versus automatic processing;
 - deep versus shallow processing;
 - focused versus divided attention.
- Describe and differentiate psychological and physiological systems of memory (e.g., short-term memory, procedural memory).
- Outline the principles that underlie effective encoding, storage, and construction of memories.
- Describe strategies for memory improvement.
- Synthesize how biological, cognitive, and cultural factors converge to facilitate acquisition, development, and use of language.
- Identify problem-solving strategies as well as factors that influence their effectiveness.
- List the characteristics of creative thought and creative thinkers.
- Identify key contributors in cognitive psychology (e.g., Noam Chomsky, Hermann Ebbinghaus, Wolfgang Köhler, Elizabeth Loftus, George A. Miller).

Motivation and Emotion

- Identify and apply basic motivational concepts to understand the behavior of humans and other animals (e.g., instincts, incentives, intrinsic versus extrinsic motivation).
- Discuss the biological underpinnings of motivation, including needs, drives, and homeostasis.
- Compare and contrast motivational theories (e.g., drive reduction theory, arousal theory, general adaptation theory), including the strengths and weaknesses of each.
- Describe classic research findings in specific motivation systems (e.g., eating, sex, social).
- Discuss theories of stress and the effects of stress on psychological and physical well-being.
- Compare and contrast major theories of emotion (e.g., James–Lange, Cannon–Bard, Schachter two-factor theory).
- Describe how cultural influences shape emotional expression, including variations in body language.
- Identify key contributors in the psychology of motivation and emotion (e.g., William James, Alfred Kinsey, Abraham Maslow, Stanley Schachter, Hans Selye).

Life-Span Development

- Discuss the interaction of nature and nurture (including cultural variations) in the determination of behavior.
- Explain the process of conception and gestation, including factors that influence successful fetal development (e.g., nutrition, illness, substance abuse).

- Discuss maturation of motor skills.
- Describe the influence of temperament and other social factors on attachment and appropriate socialization.
- Explain the maturation of cognitive abilities (e.g., Piaget's stages, information processing).
- Compare and contrast models of moral development (e.g., Kohlberg, Gilligan).
- Discuss maturational challenges in adolescence, including related family conflicts.
- Characterize the development of decisions related to intimacy as people mature.
- Predict the physical and cognitive changes that emerge as people age, including steps that can be taken to maximize function.
- Describe how sex and gender influence socialization and other aspects of development.
- Identify key contributors in developmental psychology (e.g., Mary Ainsworth, Albert Bandura, Diana Baumrind, Erik Erikson, Sigmund Freud, Carol Gilligan, Harry Harlow, Lawrence Kohlberg, Konrad Lorenz, Jean Piaget, Lev Vygotsky).

Personality

- Compare and contrast the major theories and approaches to explaining personality: psychoanalytic, humanist, cognitive, trait, social learning, and behavioral.
- Describe and compare research methods (e.g., case studies and surveys) that psychologists use to investigate personality.
- Identify frequently used assessment strategies (e.g., the Minnesota Multiphasic Personality Inventory [MMPI], the Thematic Apperception Test [TAT]), and evaluate relative test quality based on reliability and validity of the instruments.
- Speculate how cultural context can facilitate or constrain personality development, especially as it relates to self-concept (e.g., collectivistic versus individualistic cultures).
- Identify key contributors to personality theory (e.g., Alfred Adler, Albert Bandura, Paul Costa and Robert McCrae, Sigmund Freud, Carl Jung, Abraham Maslow, Carl Rogers).

Testing and Individual Differences

- Define intelligence and list characteristics of how psychologists measure intelligence:
 - abstract versus verbal measures;
 - speed of processing.
- Discuss how culture influences the definition of intelligence.
- Compare and contrast historic and contemporary theories of intelligence (e.g., Charles Spearman, Howard Gardner, Robert Sternberg).
- Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity.
- Interpret the meaning of scores in terms of the normal curve.
- Describe relevant labels related to intelligence testing (e.g., gifted, cognitively disabled).
- Debate the appropriate testing practices, particularly in relation to culture-fair test uses.
- Identify key contributors in intelligence research and testing (e.g., Alfred Binet, Francis Galton, Howard Gardner, Charles Spearman, Robert Sternberg, Louis Terman, David Wechsler).

Psychological Disorders

- Describe contemporary and historical conceptions of what constitutes psychological disorders.
- Recognize the use of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) published by the American Psychiatric Association as the primary reference for making diagnostic judgments.
- Discuss the major diagnostic categories, including anxiety and somatoform disorders, mood disorders, schizophrenia, organic disturbance, personality disorders, and dissociative disorders, and their corresponding symptoms.
- Evaluate the strengths and limitations of various approaches to explaining psychological disorders: medical model, psychoanalytic, humanistic, cognitive, biological, and sociocultural.
- Identify the positive and negative consequences of diagnostic labels (e.g., the Rosenhan study).
- Discuss the intersection between psychology and the legal system (e.g., confidentiality, insanity defense).

Treatment of Psychological Disorders

- Describe the central characteristics of psychotherapeutic intervention.
- Describe major treatment orientations used in therapy (e.g., behavioral, cognitive, humanistic) and how those orientations influence therapeutic planning.
- Compare and contrast different treatment formats (e.g., individual, group).
- Summarize effectiveness of specific treatments used to address specific problems.
- Discuss how cultural and ethnic context influence choice and success of treatment (e.g., factors that lead to premature termination of treatment).
- Describe prevention strategies that build resilience and promote competence.
- Identify major figures in psychological treatment (e.g., Aaron Beck, Albert Ellis, Sigmund Freud, Mary Cover Jones, Carl Rogers, B. F. Skinner, Joseph Wolpe).

Social Psychology

- Apply attribution theory to explain motives (e.g., fundamental attribution error, self-serving bias).
- Describe the structure and function of different kinds of group behavior (e.g., deindividuation, group polarization).
- Explain how individuals respond to expectations of others, including groupthink, conformity, and obedience to authority.

- Discuss attitudes and how they change (e.g., central route to persuasion).
- Predict the impact of the presence of others on individual behavior (e.g., bystander effect, social facilitation).
- Describe processes that contribute to differential treatment of group members (e.g., in-group/out-group dynamics, ethnocentrism, prejudice).
- Articulate the impact of social and cultural categories (e.g., gender, race, ethnicity) on self-concept and relations with others.
- Anticipate the impact of behavior on a self-fulfilling prophecy.
- Describe the variables that contribute to altruism, aggression, and attraction.
- Discuss attitude formation and change, including persuasion strategies and cognitive dissonance.
- Identify important figures in social psychology (e.g., Solomon Asch, Leon Festinger, Stanley Milgram, Philip Zimbardo).